

REMARKS/ARGUMENTS

In this Action, the Examiner objected to the drawing for including reference characters not mentioned in the specification and for not including reference characters mentioned in the specification. In response, applicant has amended the specification to bring it into conformance with the drawing. Applicant therefore requests that the objection to the drawing be withdrawn.

The Examiner also objected to the specification for containing typographical errors. In response, applicant has corrected the errors. Applicant therefore requests that the objection to the specification be withdrawn.

The Examiner objected to claim 9 for lacking a period at the end. Applicant has amended the claim to add the period, and therefore requests that the objection to claim 9 be withdrawn.

The Examiner rejected claims 32-35 under 35 U.S.C. §112, second paragraph, for not reciting relationships between the claim elements. In response, applicant has amended the claims to recite the relationships. Applicant therefore requests that the Section 112, second paragraph, rejection of claims 32-35 be withdrawn.

The Examiner rejected claims 1-24 and 60 under 35 U.S.C. §101 for claiming an abstract idea whose steps can be performed in the mind of a user or by use of a pencil and paper. In response, applicant has amended the claims to recite that the steps are implemented by processor. Support for this amendment may be found at, for example, page 5, line 30, to page 6, line 1, of the application. Applicant therefore requests that the Section 101 rejection of claims 1-24 and 60 be withdrawn.

The Examiner rejected claims 32-35 under 35 U.S.C. §101 for not clearly reciting "a process, machine, manufacture, or composition of matter." In response, applicant has amended the claims to recite that the claim elements (effectors) are implemented by processor. Applicant

therefore requests that the Section 101 rejection of claims 32-35 be withdrawn.

The Examiner rejected claims 1-24 and 27-61 under 35 U.S.C. §102(b) based upon public use or sale in view of the Lucent CentreVu® Advocate and CentreVu® Virtual Routing. This rejection is respectfully traversed. The CentreVu Advocate and CentreVu Virtual Routing did not embody or teach the claimed invention, as is made evident by the enclosed documents. Applicant therefore requests that the public-use or sale rejection of claims 1-24 and 27-61 be withdrawn.

The Examiner requested that applicant provide “the operations manual for CentreVu® Advocate and CentreVu® Virtual Routing, specifically the five predictive algorithms.” In response, applicant has enclosed herewith the CentreVu® Advocate User Guide, and the DEFINITY® Enterprise Communications Server Release 6 Call Vectoring/Expert Agent Selection (EAS) Guide. On information and belief, the term “Virtual Routing” refers to look-ahead interflow and best-service routing, both of which are described in the EAS Guide.

The Examiner rejected claims 1, 28, 32, and 36 under 35 U.S.C. §102(b) over a Business Wire article of February 4, 1998, entitled, “Lucent Technologies Unveils Breakthrough Call Center Software that Improves Customer Care, Increases Sales and Reduces Cost” (Business Editors et al.). This rejection is respectfully traversed.

With respect to “determining a value to the resource,” the Examiner stated:

Para 3 and 9, Business Editors et al. teach this approach shifts the paradigm of the call center to a model that – for the first time – more fairly balances the workload of the agents will matching them to the best prospects for the business. CentreVu® Advocate will consider all variables – the time a caller will likely wait, the media through which the call has come in (phone, internet, fax, video, e-mail), when the agent

with the best skill set for the customer will become available, tiers of service, call volume, sales goals – to determine the best and fairest use of the agent and the best call to take that will bring the greatest value to the business at that time.

The examiner interprets a value is determined. (emphasis added)

As the Examiner's own language clearly shows, the concern of the CentreVu capability is the value to the business, and not value to the resource. Thus, Business Editors et al. may be thought to disclose the first two elements of the claims, to wit, determining available resources that possess skills needed by the work item, and for each of the determined resources, determining a business value of having the resource service the work item. But claim 1 also recites, "for each of the determined resources, determining a value to the resource of servicing the work item, the value to the resource being a measure of how serving the work item by the resource helps or hurts goals of the individual resource, wherein the goals of the resource include per-skill time-allocation goals of the resource." Claims 28, 32, and 36 contain equivalent recitations. But nowhere in the cited passage of Business Editors et al., or anywhere else in this reference, may be found a corresponding disclosure, teaching, or suggestion. Specifically, even the passage of the reference cited by the Examiner for the proposition that the reference determines a value to the resource instead explicitly states that it determines the value to the business, and not to the resource! Since there is no corresponding teaching in the reference, the reference does not and cannot render the invention of claims 1, 28, 32, and 36 unpatentable. Applicant therefore requests that the Section 102(b) rejection of claims 1, 28, 32, and 36 over Business Editors et al., be withdrawn.

The Examiner next rejected claims 2-5 and 37-40 under 35 U.S.C. §103(a) over Business Editors et al. in view of U.S. patent number 6,389,400 (Bushey et al.). This rejection is also respectfully traversed.

Claims 2-5 depend from claim 1, and claims 37-40 depend from claim 36. It has been shown above that Business Editors et al. does not disclose, teach, or suggest the invention of the base claims. And it has been shown before (see, e.g., Applicant's/Appellant's Appeal Brief filed on March 4, 2004) that Bushey et al. also does not disclose, teach, or suggest the recitations of these claims. Hence, the combined teachings of these two references likewise fail to disclose, teach, or suggest the matter claimed in the dependent claims. Applicant therefore requests that the Section 103(a) rejection of claims 2-5 and 37-40 be withdrawn.

With respect to claims 37-40, the Examiner stated that they recite substantially the same limitations as claims 2-5, and therefore the same rejection applies. But applicant has shown above that the rejection of claims 2-5 is in error. Hence, claims 37-40 are patentable over the applied references for at least the same reasons as claims 2-5 are patentable thereover.

The Examiner next rejected claims 6-10, 13-19, 21, 22, 29-31, 33-35, 41-45, 48-54, 56, and 57 under 35 U.S.C. §103(a) over Business Editors et al. and Bushey et al. in view of U.S. patent number 5,963,911 (Walker et al.). This rejection is also respectfully traversed.

Claims 3-8 depend from claim 1 via claim 3. Claim 1 recites, inter alia, "for each of the determined resources, determining a value to the resource of servicing the work item, the value to the resource being a measure of how serving the work item by the resource helps or hurts goals of the individual resource, wherein the goals of the resource include per-skill time-allocation goals of the resource." It was shown above, in the traversal of the Section 101(b) rejection of claim 1 and the traversal of the Section 103(a) rejection of claim 3, that Business Editors et al. and Bushey et al. do not render unpatentable the inventions of claims 1 and 3. Applicant also asserts that Walker et al. do not disclose, teach, or suggest the invention of claims 1 and 3, and the Examiner has not argued to the contrary; the Examiner has merely asserted that Walker et al. discloses

the additional matter recited in claims 6 and 8. Consequently, the combined teachings of the three references do not render claims 6-8 unpatentable for at least the same reasons as they do not render claims 1 and 3 unpatentable.

Claim 9 is an independent claim, and claim 10 depends therefrom. Claim 9 recites, inter alia, "for each of the determined resources, determining a resource treatment value, the resource treatment value being a measure of how the resource is meeting goals of the individual resource, the resource treatment value comprising a sum across all of a plurality of resource treatments of a product of a value of the resource for the resource treatment and a weight of the work item for how much weight said resource treatment has relative to others of the resource treatments and how much weight the resource treatments have relative to a different weight of the business value." (emphasis added). The Examiner asserted that a corresponding disclosure may be found in Walker et al. at col. 2, lines 52-59, and at col. 3, lines 48-52. But these passages merely recite

means for assigning to each job a cost function which is calculated as a function of the time at which the job will be performed;

means for determining, for each possible combination of jobs with resources, the projected cost dependent on the time at which each resource is forecast to be available and the value of the cost function for the respective job at that time;

and

In this invention the performance of the job and the availability of the resource are calculated as time-dependent functions, with a greater cost weighting being applied to resource-job combinations with a greater likelihood of failing to achieve a target time.

It should be evident that Walker et al. fails to disclose, teach, or suggest at least those aspects of the claimed invention emphasized above. Firstly, the cost function is not a measure of how the resource is meeting its own goals, but rather is a function of the job. Secondly, the projected cost is not a measure of how the resource is meeting its own goals, but rather is a measure of the cost to the business (for example, the cost of the job failing is the same for all resources – see, e.g., col. 6, line 67 to col. 7, line 2). Thirdly, neither the cost function nor the projected cost is a sum across all of a plurality of resource treatments; it is merely the function of the cost of the job failing and the resource's probability of failing the job – see id.) Fourthly, no weighting is indicated in any of the references between the cost function or the projected cost of Walker et al. and the measures of Bushey et al. which, according to the Examiner, correspond to the claims' business value. So, for at least these reasons, the combined teachings of the references fail to disclose, teach, or suggest the invention claimed in claims 9 and 10.

Claim 13 is an independent claim and claims 14-17 depend therefrom. Claim 13 recites, inter alia, “for each of the determined work items, determining a value to the work item of being serviced by the resource, the value to the work item being a measure of how the work item is meeting goals of the individual work item, wherein the goals of the work item include how long the work item has been waiting for service, how long the work item may have to wait for service, and how much the work item has exceeded its target wait time.” (emphasis added) The Examiner again correlated these recitations with the cost function of Walker et al., which the Examiner characterized previously (see, e.g., the rejection of claim 9) as being a value to the resource. But, even if one ignores this inconsistency, the passage (col. 6, lines 53-63) of Walker et al. referenced by the Examiner clearly states that the cost function represents a penalty for failing to meet an agreed time, which is either a monetary cost if compensation is payable to the customer or a virtual cost

such as the damage to the company's reputation. So, the cost function is clearly a value (cost) to the business, and not a value to the work item of being serviced by a particular resource.

The Examiner further referenced Bushey et al. col. 14, lines 12-21, which state that

Customer wait time is based on the level of match between the customer and agent, the agent availability, and the amount of time the customer has been waiting. Factors that are considered at the service center include: (a) customer wait time (longer the wait time the greater dissatisfaction), (b) the match score (the better the match, the better achievement of goals), and (c) the avoidance of the customer abandoning their call (abandoned call has potentially lost sales and greater dissatisfaction).

It is not clear if, and how, this teaching of Bushey et al. could be combined with the cost function or the projected cost of Walker et al. The Examiner has shed no light on this issue. But even if one assumes, for purposes of argument, that such a combination could be effected, neither the individual nor the combined teachings of the applied references teach taking into consideration how long the work item may have to wait for service and how much the work item has exceeded its target wait time. Since no such teaching is provided, the references do not render unpatentable the invention of claim 13 and of claims 14-17 dependent therefrom.

Claim 21 is an independent claim, and claims 18-20 and 22 depend therefrom. Claim 21 recites, inter alia, "for each of the determined work items, determining a work item treatment value, the work item treatment value being a measure of how the work item is meeting goals of the individual work item, the work item treatment value comprising a sum across all of a plurality of work item treatments of a product of the value of the work item for the work item treatment and a weight of the work item for how much weight said work item treatment has relative to others of the

work item treatments and how much weight the work item treatments have relative to a different weight of the business value." (emphasis added)

The Examiner purported to find a corresponding teaching in Bushey et al. But applicant has already addressed the disclosure of Bushey et al. and distinguished that disclosure from his claimed invention elsewhere (see, e.g., Applicant's/Appellant's Appeal Brief filed on March 4, 2004). The Examiner has never addressed and rebutted applicant's explanations. Instead, the succession of rejections has roamed through the specification of Bushey et al., referencing this passage one time and that passage the next, while all the time ignoring the fact that all of these passages disclose substantially the same thing. This time, the Examiner purported to find a teaching corresponding to the claim recitations of work item treatment value at col. 2, lines 53-56, col. 3, lines 56-59, and col. 11, lines 5-17, of Bushey et al. As previously, the Examiner is again mistaken.

Even if one assumes for purposes of argument that all of applicant's prior attempts to distinguish his claimed invention from the teaching of Bushey et al. were wrong and ineffective, at least one distinction still exists: there is no weighting in Bushey et al. or any of the other applied references for how much weight the work item treatments have relative to a different weight of the business value. The Examiner has asserted that the agent's attribute values in Bushey et al. correspond to the business value of claim 21, and has asserted that the customer attribute values in Bushey et al., correspond to the work item treatment values. As the equation of Fig. 7 of Bushey et al. clearly shows, the weight W associated with an attribute value C of a customer is the same weight as is associated with that attribute value A of an agent. Stated differently, only different attributes of a customer and an agent have different weights, but the same attribute of a customer and an agent has the same weight; there is no weighting of an attribute of the customer relative to the attribute of the agent. Ergo, there is no weighting of work item treatment values relative to a different weight of the business value.

So, for at least this reason at a minimum, the references fail to render unpatentable claim 21 and claims dependent therefrom.

With respect to claims 29-31, 33-35, 41-45, 48-54, 56, and 57, the Examiner stated that they recite substantially the same limitations as claims 6-10, 13-19, 21, and 22, and therefore the same rejections apply. But applicant has shown above that the rejections of claim 6-10, 13-19, 21, and 22 are in error. Hence, the rejected claims 29 et seq. are patentable over the applied references for at least the same reasons as claims 6-10, 13-19, 21 and 22 are patentable thereover.

In summary, the Section 103(a) rejection of the claims has been properly addressed and disposed of. Applicant therefore requests that this rejection of the claims be withdrawn.

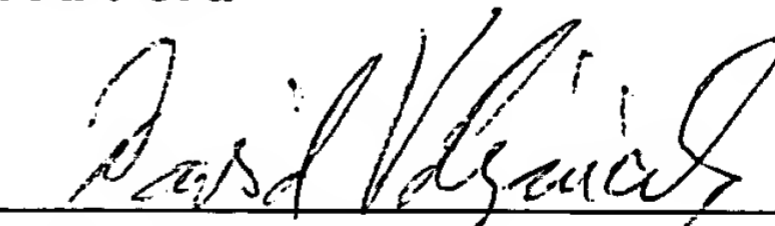
Applicant suggests that, since all of the objections and rejections made by the Examiner have been properly addressed and overcome, the application is now in condition for allowance. Applicant therefore requests that the application be reconsidered and thereafter be passed to issue.

Applicant believes that the foregoing is dispositive of all issues in the application. But if the Examiner should deem that a telephone interview would expedite prosecution, applicant invites the Examiner to call his attorney at the telephone number listed below.

Respectfully submitted,

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